

**What is claimed is:**

1. A radio packet communication system for performing radio packet communication between a base station and a mobile station, wherein:

5 the base station comprises:

an adjacent cell interference amount calculator configured to calculate an adjacent cell interference amount caused by an adjacent cell which is adjacent to an original cell managed by the base station; and

10 an adjacent cell interference amount notifier configured to notify the mobile station of the adjacent cell interference amount; and

the mobile station comprises:

15 a plurality of radio resource associators configured to associate a radio resource with a propagation loss in the radio packet communication;

a selector configured to select a radio resource associator in accordance with the adjacent cell interference amount notified by the base station;

20 a propagation loss calculator configured to calculate a propagation loss in the radio packet communication; and

a radio resource assigner configured to assign the radio resource associated with the calculated propagation loss to the radio packet communication, in accordance with the selected radio resource associator.

2. A radio packet communication method for performing radio packet communication between a base station and a mobile station, the mobile station having a plurality of radio resource

associators configured to associate a radio resource with a propagation loss in the radio packet communication, the method comprising the steps of:

5 calculating, in the base station, an adjacent interference amount caused by an adjacent cell which is adjacent to an original cell managed by the base station;

notifying, in the base station, the mobile station of the adjacent cell interference amount;

10 selecting, in the mobile station, a radio resource associator in accordance with the adjacent cell interference amount notified by the base station;

calculating, in the mobile station, a propagation loss in the radio packet communication; and

15 assigning, in the mobile station, the radio resource associated with the calculated propagation loss to the radio packet communication, in accordance with the selected radio resource associator.

3. A base station for performing radio packet communication 20 with a mobile station, the base station comprising:

a plurality of radio resource associators configured to associate a radio resource with a propagation loss in the radio packet communication;

25 an adjacent cell interference amount calculator configured to calculate an adjacent cell interference amount caused by an adjacent cell which is adjacent to an original cell managed by the base station;

a selector configured to select a radio resource associator in accordance with the adjacent cell interference

amount;

a propagation loss calculator configured to calculate a propagation loss in the radio packet communication; and

5 a radio resource assigner configured to assign the radio resource associated with the calculated propagation loss to the radio packet communication, in accordance with the selected radio resource associator.

4. The base station according to claim 3, further comprising  
10 an adjacent cell interference amount notifier configured to notify the mobile station of the adjacent cell interference amount.

5. The base station according to claim 3, wherein the  
15 adjacent cell interference amount calculator calculates a total interference amount based on a signal transmitted from the mobile station, calculate an original cell interference amount in the original cell base on a received packet amount, and calculate the adjacent cell interference amount base on the  
20 total interference amount and the original cell interference amount.

6. The base station according to claim 3, wherein the radio resource associator is updated in accordance with the adjacent  
25 cell interference amount calculated during a predetermined period.

7. A mobile station for performing radio packet communication with a base station, the mobile station

comprising:

a plurality of radio resource associators configured to associate a radio resource with a propagation loss in the radio packet communication;

5 a selector configured to select a radio resource associator in accordance with an adjacent cell interference amount notified by the base station, the adjacent cell interference amount being caused by an adjacent cell which is adjacent to an original cell managed by the base station;

10 a propagation loss calculator configured to calculate a propagation loss in the radio packet communication;

a radio resource assigner configured to assign the radio resource associated with the calculated propagation loss to the radio packet communication, in accordance with the selected

15 radio resource associator.